

DOCUMENT RESUME

ED 214 822

SO 013 935

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TITLE The Creative Influence: What Is It?
PUB DATE [Mar 82]
NOTE 30p.
EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Classroom Environment; Creative Development; Creative Expression; Creative Thinking; *Creativity; *Creativity Research; Discovery Processes; Educational Needs; Foundations of Education; Intelligence; *Personality Traits; *Self Expression; Technology

ABSTRACT

The concept of creativity has many attributes and is a significant factor in our lives. Creative persons are observant, express part-truths, see things as others do not, are independent in cognitive faculties, are motivated by their talent and values, can hold many ideas at once, have greater sex drive, see a complex world, and have strong egos. Creative persons are often unpopular with teachers, find it difficult to conform within institutional settings, live with anxiety, tend to make deviant scores on personality tests, have some relationship to mental illness, are productive at self-initiated activities, and have creative encounters. Understanding and fostering creativity is one of the most significant but least understood aspects of the educational system. It is impossible to determine the level of creative potential within an individual. A major accomplishment of our system is to allow the seeds of creativity to be sown, for creative influence, are nourished by institutions that promote freedom of expression. In the classroom, creative behavior is often prompted by giving students opportunities to learn in many ways but suited to their motivation and abilities. The technological system we live under threatens the creative influence, since it's the antithesis of it. The creative spirit is not a panacea for all our problems, but a creative person can demonstrate a mastery over random events. (NE)

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MAR 15 1980

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The Creative Influence: What Is It?

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The Creative Influence: What Is It?

Abstract

This paper attempts to explain the concept of creativity and the creative influence from an examination of the research literature. There are references to the educational system in this country and its influence on creativity. Also there is a brief critique of our technical society and the affect it has on the creative influence. Moreover, creativity is explained as a most significant factor in our lives, yet very few people understand this unique process.

The Cr^aetive Influence: What Is It?

Defining a creative act or identifying a creative person is quite difficult. Many people do not understand creativity or comprehend the creative influence. Being creative usually involves a demonstration of certain unique abilities, insights, and sensitivities. Although creativity may not be well understood or recognized, it is one of America's secret ingredients that continues to be our most powerful source of unique human productivity. Creativity represents the elusive joie de vivre for most people.

Numerous references (written and spoken) have been made to the concept of creativity without much specific knowledge of how the creative process can be identified and encouraged. Will Durant said the most essential thing in the universe is creative power.¹ Aldous Huxley said that creative work, of however humble a kind, is the source of man's most solid, least transitory happiness.²

Creativity is frequently misunderstood as being a type of behavior associated solely with scholastically bright, high achievers. This is a common mistake. A creative burst can develop from most any level of measured ability, and it often comes from the mid-range of measured academic talent. Creative artists, writers, mathematicians,

architects, and scientists, according to Jane C. Zahn, differ from those less creative souls in the following ways:

1. Greater Aesthetic Sensitivity. Creative persons place a high value on aesthetic experiences and responses.
2. Imaginative. Creative persons have more imaginative, different, novel ideas, both in quality and quantity.
3. Flexible. Creatives have more ability to shift and to adapt, to deal with the new, the unexpected, and the unforeseen.
4. More Self-reliant, Individualistic, and Independent. Creative persons value their own independence and autonomy.
5. More Perceptive. Creatives show a preference for perceiving that allows for flexibility and spontaneity.
6. Commitment to Their Work. Creatives have a profound commitment to the meaning of their work.³

In this country understanding creativity through an intense systematic study of individual creative traits and personality characteristics was not given much attention until the 1950s and early 1960s. Joy Paul Guilford made a

presidential address on "Creativity" to the American Psychological Association in 1950. This address stimulated considerable interest in creativity, and during the late 1950s and early 1960s research on creativity, particularly applications for education, began to appear in print. Guilford did most of his work on creativity at the University of Southern California, and he considered divergent thinking as one of the most important ingredients of creativity.⁴ Three significant characteristics of divergent thinking are flexibility, originality, and fluency; or the ability to produce rapidly a succession of ideas that meet some requirements.

Donald W. MacKinnon, while conducting research at the Institute of Personality Assessment and Research within the University of California at Berkeley, has identified the creative person as: relatively uninterested in small details, or in facts for their own sake, and more concerned with their meanings and implications, possessed of considerable cognitive flexibility, verbally skillful, interested in communicating with others and accurate in so doing, intellectually curious, and relatively disinterested in policing either their own impulses and images or those of others.⁵ MacKinnon also said that one of the most salient characteristics of the creative person is courage. "Since the creative person is not preoccupied with the impression he

makes on others, and is not overly concerned with their opinion of him, he is freer than most to be himself."⁶

In 1960, MacKinnon published an article titled, "The Highly Effective Individual," and he conceived of two significant variables, from numerous sources, as being central and determinative of the highly effective individual:

1. Emotional stability or personal soundness.
2. Creativity of thought and action.⁷

MacKinnon has found that creative people not only experience more anxiety, they also have stronger egos* and have a perceptual preference for the complex and asymmetrical; they prefer the richness of the distorted to the stark barrenness of the simple and show a preference for intuition. "In all the groups we have studied we have found that self-image and ego-ideal are of crucial importance in determining the level of creativeness with which a person lives his life and practices his profession..."⁸

Rollo May also identifies anxiety as an important and meaningful characteristic of creative people. "Creative people, as I see them, are distinguished by the fact that they can live with anxiety, even though a high price may be paid

* Some researchers theorize that creativity is a function of the ego within every human being, and it does not necessarily depend on inherited talent, environment, or upbringing.

in terms of insecurity, sensitivity, and defenselessness. . . ."⁹
May explains that creatives can accept anxiety and use it in
molding their disorderly universe "close to the heart's
desire." Anxiety about the nature of the world and their
relationship to it may be a motivating drive for creatives.
Nietzsche once said, "One must harbor chaos within to give
birth to a dancing star."¹⁰

Frank Barron has completed some very good studies
of creative persons in art and science, and he found that
creatives confront their anxiety through a desire for the
complex, disorderly*, unsymmetrical, and chaotic.¹¹ Barron
identified 12 basic characteristics of creative people from
his studies:

1. They are more observant.
2. They express only part-truths.
3. In addition to seeing things as others do,
they see things as others do not.
4. They are independent in their cognitive
faculties, which they value very much.
5. They are motivated by their talent and
values.

* Barron suggests that creatives who prefer irregularities
and disorder and trust themselves in searching for a new
order learned these attitudes from different interpersonal
relations they had early in life.

6. They are more capable of holding many ideas at once and comparing more ideas, hence making a richer synthesis.
7. They have more sexual drive and are more vigorous from a physical point of view, and more sensitive.
8. They have more complex lives and see a more complex world.
9. They become more aware of unconscious motives and fantasy life.
10. They have strong egos that permit them to regress and to return to normality.
11. They allow the distinction between subject and object to disappear for certain periods of time, as in love and mysticism.
12. The objective freedom of their organism is at a maximum, and their creativity is a function of objective freedom.¹²

Paul Heist has identified the creative person as: independent, innovative, flexible, with a highly developed sense of the theoretical and the aesthetic, and exercising discipline only when considered necessary.¹³ Philip Wesley Jackson and Samuel Messick found at the level of everyday experience that creative expression of the highest quality tends to come from people who limit their efforts to a single

mode of expression.¹⁴ The professional writer, researcher, singer, actor, and educator might be good examples.

Sarnoff A. Mednick, introduces the concept of usefulness within the dimension of creativity (important for educators and students). Mednick maintains that the answer 7,363,474 to the question, "How much is 12 and 12?" is original but not creative, because it is not useful within accepted mathematical conventions.¹⁵ However, creatives do not usually concentrate on usefulness as an important aspect of their creative work. Utility may be a byproduct of their efforts, but it is not usually a motivating conceptual drive. This is most obvious in the work of expressive artists (e.g., painters and sculptors).

Nevitt Sanford studied the research accomplished by MacKinnon that indicates most creative people are distinguished from less creative ones by greater flexibility of thinking, breadth of interest, autonomy, and integrity. The conclusion from this said Sandford, is that, in general, the creative person is above all a highly-developed person, and that educational programs can have an effect on such development in college.¹⁶ In the late 1950s Sanford was touring Eastern Europe, and he said, "When in Russia I suggested to various Soviet professionals and officials that as the living standard in their country rose, and as long as the heavy emphasis on education continued, young people would be increasingly

disaffected and deviant. (And, of course, creative, though I didn't mention this.)"¹⁷

Perhaps the nationwide strikes and formulation of Solidarity (free labor unions) in Communist controlled Poland are examples of what Sanford suspected might happen one day. Recent Soviet educational literature gives an emphasis to the notion of creativity, and it is not hidden: "What does the quality of professional training of a specialist mean? The answer would seem clear: a specialist must know more, his knowledge must be deeper and more lasting, and his outlook must be broader."¹⁸

The creative element could be a hidden and unknown threat to Communist block countries. Highly-developed thinkers are not satisfied with simplistic rhetoric and ridged controls. Unknown to many Soviet leaders, the creative influence from education may be a ticking time bomb within their pedestrian political structure. Ridged political groups (most obvious in the era of McCarthyism in this country) cannot handle the creative freedom of artists or activist citizens protecting their rights. Dogmatists have difficulty tolerating a creative freedom that is an uninhibited and continuing threat to external control.

It has been found that a desire for conformity, an excessive faith in logic, perfectionism, and reliance on authority are common destroyers of creativity.¹⁹ Perhaps

this is why so little creativity comes from professional military personnel and the bureaucracy. Institutional controls can smother the creative influence but not destroy it. Alexander Solzhenitsyn is a good example.

But how can creativity flourish: In 1927 Joseph Wallas provided an early rough description of four main steps in the creative process: preparation, incubation, illumination, and verification.²⁰ These primary steps have been expanded and embellished in various ways. A popular modification of this process, developed by Alex F. Osburn in 1939, is what he called brainstorming.²¹ Free association with no external controls imposed during brainstorming sessions have attempted to induce creativity. Brainstorming quite often involves a pooling of ignorance and mediocrity in search of innovation. Creative people usually work hard at their craft, and they resent faddish attempts to reproduce their efforts. Georgia O'Keeffe (a famous painter now in her 90s and living in New Mexico) said, "You have a chance to get what you want if you go out and work for it. But you must really work, not just talk about it."²² Brainstorming usually turns out a lot of hollow talk.

Silvano Arieti provides a good summary of some major theories of creativity development along with other insights, some quite complex, in his book, Creativity: The Magic Synthesis.²³ Arieti, as the title of his book suggests, does

conclude that creativity is something of a magic synthesis. It is difficult to know exactly how the creative factor works for people. Anyone may be somewhat creative at any time.

Jack A. Chambers completed a study for the National Center for Educational Research and Development in 1972 titled "College Teachers: Their Effect on Creativity of Students."²⁴ Chambers indicated introversion, dominance, and self-sufficiency as being associated with creativity for teachers and researchers. He said there are clear-cut behavioral patterns that differentiate teachers who facilitate creative development from those who hinder it. According to Chambers' research, encouragement through individual contact was found to be the most important aspect of student-teacher relationships affecting creativity.²⁵ In his study of gifted adolescents, Ernst Kris said he had never seen a case of artistic talent that had not begun by identifying with an older person.²⁶ Creativity seems to be enhanced by a climate of indulgence, safety, friendliness, and cooperation that is provided by a mentor.

Ellis Paul Torrance has been involved in the study of creativity for the past 25 years - its nature, measurement, and training. Torrance has concluded that many kinds of talent, including creative talent, exist in most populations at any given time.²⁷ As a contribution to education, Torrance

has attempted to help teachers identify and promote creativity in the classroom. Some observable signs of creative behavior in the classroom, according to Torrance, are:

- Intense absorption in listening, observing, doing.
- Intense animation and physical involvement.
- Challenging ideas of authorities.
- Taking a close look at things.
- Eagerly telling others about one's discoveries.
- Continuing a creative activity after the scheduled time for quitting.
- Showing relationships among apparently unrelated ideas.
- Following through on ideas set in motion.
- Manifesting curiosity, wanting to know, digging deeper.
- Guessing or predicting outcomes and then testing them.
- Honestly and intensely searching for the truth.
- Resisting distractions.

- Losing awareness of time.
- Penetrating observations and questions.
- Seeking alternatives and exploring new possibilities.²⁸

Torrance stresses that creativity requires both sensitivity and independence, and there is a weak relationship between creative thinking and generalized ability as measured by intelligence tests.²⁹ Getzels and Jackson also found this weak relationship.³⁰ Certain childlike (usually called childish) mental operations are demonstrably essential to creativity, among them playfulness, wishfulness, spontaneity, approximation, and free-floating openness of mind. Eric Hoffer said, "It is the child in man that is the source of his uniqueness and creativity."³¹

In summarizing some of his research, Torrance said the most exciting insight is that different kinds of students learn best when given opportunities to learn in ways best suited to their motivations and abilities. "Whenever teachers change their ways of teaching in significant ways, a different group of learners become the stars of 'high achievers.'"³² This statement demonstrates the highly subjective nature of a classroom atmosphere. It also indicates that creativity may be fostered in some cases and thwarted in other cases usually depending on the personality of the teacher. The mix of personalities between student and

teacher may be quite significant for developing the creative influence. Teachers (and the general public) are usually concerned with more conventional aspects of ability, and they prefer a relatively less creative student.

There is some evidence that indicates creative students are relatively unpopular with their teachers.³³ Albert Einstein is a good example; he was a questioning, outspoken student, and none of his professors would give him a recommendation when he finished his graduate work. In a strong statement Donald MacKinnon said, "Almost without exception, the conclusions seem to be that those with creative potential are neglected, if not discriminated against, at all levels of American education."³⁴

In regard to education, MacKinnon said, "The concept of educating for creativity necessitates our thinking of it not as a fixed trait of personality but as something that changes over time, waxing and waning, being facilitated by some life circumstances and situations and inhibited by others."³⁵ A considerable number of research studies on creativity have been devoted to specific teaching strategies for developing fluency, originality, and flexibility.

Creative students may find it most difficult to conform within institutional settings. "...there are indications that high creativity may be associated with unusual degrees of introversion and with certain kinds of high

anxiety, as well as with flexibilities of imagination that are quite disabling in regard to high efficiency and freedom from oscillation in routine performances."³⁶ In other words, young creatives might give the appearance of being quite unstable. Their creative traits (i.e., high anxiety and introversion) could be seen as deviant or psychopathic behavior.

Rollo May suggests that creative people live with considerable anxiety in their attempts to create order from a chaotic world.³⁷ The creative act may be understood as an encounter that brings with it anxiety and tension. The intensity of a creative encounter can alter accepted or conventional behavior patterns (many creative people dress out of fashion, eat irregularly, and have peculiar work habits while engaged with their craft).

Creatives tend to make deviant scores on personality tests like the Minnesota Multiphasic Personality Inventory (MMPI); this is reflective of the complexity of personality, candor, lack of defensiveness, and openness to experience, and not a genuine personality distortion.³⁸ Many professionals make no attempt to determine what a deviant MMPI score means beyond the limited and sometimes misleading definition of poor mental health. Hence, creativity can be mistaken for psychopathic behavior. "Unconventional people are likely to give unconventional responses to diagnostic

test items and thus obtain scores indicating the presence of psychopathology."³⁹ It has been found that creative professionals (scientists, architects, and novelists) were prone to give unusual responses to word association tests, and that unusualness of mental association was one of the best indices of an individual's originality in professional work.⁴⁰

The close relationship between mental illness and creativity has been well documented by George Pickering in the Creative Malady.⁴¹ Van Gogh, at the height of his career, cut off his ear, then committed suicide; he was a schizophrenic. Poe was an alcoholic, and Virginia Woolf was seriously depressed. It has been said that the artist threads his way between the Scylla of routine and the Charybdis of insanity.⁴² Creativity and insanity have been linked to the ability to perceive reality differently.

One of the first attempts to make a relationship between creativity and mental illness was accomplished by an Italian psychiatrist, Cesare Lombroso, with an essay written in 1864 and titled "Genius and Insanity." In 1895 he published his famous study titled The Man of Genius.⁴³ Lombroso reported that Ampere, Comte, Tasso, Newton, Rousseau, and Schopenhauer had attacks of insanity. He believed that being a creative genius was an expression of degenerative psychosis. Silvano Arieti explains the complications

associated with analyzing the illnesses of creative people, and he indicates that great innovators in the study and treatment of mental illness have not been immune to psychiatric disorders themselves (e.g., Freud, Jung, and Sullivan). Arieti has done a good job in explaining the possible connection between psychosis and creativity.⁴⁴

Many people who achieve distinction are hypomaniacs with mood swings from one of energy, exuberance and confidence, to one of the reverse. "Freud was an example. Such people are quite sane, and, as long as circumstances do not press too hard, are in no danger and often achieve great things. ...Plato thought there were two forms of delirium--insanity and inspiration."⁴⁵ The classical Greeks thought of creativity as the gift of divine madness. W. H. Auden puts this idea in a modern romantic form: "Every 'original' genius, be he an artist or a scientist has something a bit shady about him, like a gambler or a medium."⁴⁶

The creative influence may be linked to characteristics of disorder, but creative people are quite productive at self-initiated activities. The identification and study of talented students accomplished by Wallach and Wing gives emphasis to self-initiated activities. "As soon as one looks outside the classroom for evidence of talented accomplishments or attainments, rather than simply looking within the classroom at academic achievement, one finds the student's

general intelligence status singularly unrevealing as to who is more likely to exhibit the superior performances. Instead, the clues are provided by information about the ideational resources of the person--something quite different from intelligence."⁴⁷ There seems to be compelling evidence for predicting future creative behavior from past creative behavior.

One significant aspect of creativity involves intensity with the so-called encounter. A creative encounter keeps an individual intensely focused on the creative act. Rollo May explains that Thomas Wolfe was a "genius without talent."⁴⁸ Wolfe was creative, because he threw himself so completely into his material (the encounter) and the challenge of it. As May sees it, genuine creativity is characterized by an intensity of awareness.⁴⁹ Creative people are absorbed in their work, and they are usually quite productive. It is often a matter of devotion and sometimes a quest for artistic perfection. Creatives never seem to be quite satisfied with their previous work; they continue to strive for something better through continued efforts.

Understanding and fostering creativity is perhaps one of the most significant but least understood aspects of our educational system. There are many distractions and complications. Technology through the use of numbers can influence our perceptions and cause us to be quite concerned

when indicated ability (attitude scores or competency tests) goes down a few points, but concern for the creative spirit hardly stirs serious debate. One reason for this lack of concern is that creative potential defies measurement with numerical objectivity. Many tend to dismiss the notion of creativity as being "something nice to have" but not essential to scholastic success.

It is virtually impossible to determine the level of creative potential within an individual (particularly a young student). There are no accurate tests for creativity, primarily because the concept defies description (people cannot agree on what is or is not creative). Many famous creative writers, painters, actors, and sculptures had their work rejected numerous times before recognition finally came. Some were not recognized until many years after their death. Creativity is an elusive, dormant trait.

Developing a disciplined, technically efficient society has become a major concern for many educators, but there are some dangers here. Both the Japanese and Germans of World War II were the most disciplined people the world has ever seen. They were also the most gullible and politically restricted people the world has seen. The dimensions of individual freedom of choice and freedom of expression were missing. Also, the characteristics of a creative educational environment (indulgence, safety, friendliness, and cooperation) were absent.

One of the most significant aspects of our public school system is the development of latent creative talent. This powerful undercurrent, often hidden and unnoticed while worrying about test scores, and other objective educational data, is perhaps the major strength of our educational system. No other country in the world attempts to educate all its citizens, regardless of variations in ability measures. During this educational process, the seeds of creativity are probably sown. This may be one of education's major accomplishments, yet it goes virtually unnoticed by educators and the general public. With a concentrated effort to recognize and develop creative potential in the classroom, it is conceivable that more students would develop into what MacKinnon referred to as highly effective individuals. A highly effective person is stable, creative, and, not too dependent upon technology.

There may be a danger in thinking of technical systems (e.g., educational institutions) and technology in general as a means to an end. For many industrialists, technology is the end. Technology has become the ultimate factor in our lives due to its universal nature and monistic tone. However, human potential, in the form of creative releases, can reduce and devastate the glory of technology. North Vietnam was not deterred by technically superior weapons systems of the United States during the Vietnam War.

As masters of technology, we matched our superior technical ability against the technically inferior, but determined and exceptionally creative, North Vietnamese. And we lost! This simple lesson is hardly understood by a public that goes mute when Vietnam is mentioned. The Soviet Union is now getting a chance to understand this lesson in Afghanistan.

Creative influences are probably nourished by institutions that promote freedom of expression. The exact formula for developing a creative influence is difficult to gauge, but it is understood that individual support and contact are necessary along with indulgence, safety, friendliness, and cooperation. This type of educational climate is more likely to be found in a small, supportive classroom. But, due to financial shortages, classrooms are becoming larger; teachers are disgruntled when told that failures (i.e., low test scores) are solely their responsibility. The public seems to be indifferent to the plight of teachers. Educators at all levels seem to reflect the competitive aspects of our society, and they become less humanistic (and perhaps less creative) when driven by a technical system that requires high quantitative test scores in place of Reason.

Complex technical societies require disciplined citizens, but introspection, thoughtful contemplation, and playful approaches to life's serious follies are a means to

Reason and life style alternatives. Creativity in human affairs is a crucial need in the technical age, and considerable support is required to promote an understanding of creativity. We now find that the more we strive for control through technology, the less control we have. Nuclear weapons is the most vivid and satanic example. It seems there is no way to stop producing these magnificently destructive machines; we are content to wait while more nuclear weapons are being built around the world. Nostrums from the technical elite provide no solutions. The nuclear apocalypse is eminent.

An irony of the twentieth century is that our Arcadian creative energies have helped to produce a turgid technical system that now threatens the creative influence. Technology is controlled, narrow, competitive, cold, and strict--the very opposite characteristics are found in the creative environment. Educational institutions have considerable opportunity to enhance the creative influence, but in most cases they are captives of poor economic conditions, petulant political trends, and unreasonable technical demands. It is now a creative challenge for professionals to function effectively within an academic system.

Perhaps more consideration of and attention to the creative process can relieve some of the vitriolic technical pressures on our society. Many people now face desperate

situations in their lives without the means to cope. They are locked into a technical life style. Today, with unprecedented wealth and magnificent technical know-how, we are faced with serious economic problems, depressed support for educational institutions, and some feelings of impending doom. A creative perspective might help. "To the creative individual, all experience is seminal--all events are equidistant from new ideas and insights--and his inordinate humanness shows itself perhaps mainly in the ability to make the trivial and common reach an enormous way."⁵⁰ Rousseau expressed the same thought a bit more elegantly when he said, "The more sensitive the soul of the observer, the greater the ecstasy aroused in him by this harmony."⁵¹

A creative spirit will not solve all our problems, but through diligence, courage, honesty, and hard work, the creative personality is able to demonstrate a mastery over random events. The resolve to attempt difficult tasks is enhanced. Eric Hoffer said that the quality of a nation, its innermost worth, is made manifest by its dregs as they rise to the top; by how brave they are, how humane, how orderly, how skilled, how generous, how independent or servile; by the bounds they will not transgress in their dealings with a man's soul, with truth, and with honor.⁵² This is accomplished by spirited people projecting a creative influence.

We might consider the creative influence as a unique human factor that helps to keep us from being overwhelmed. It is important not to forget or overlook this significant aspect of our procrustean nature.

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